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## NOVEL ANTIBODIES AND LIGANDS FOR "BONZO" CHEMOKINE RECEPTOR

## ABSTRACT OF THE DISCLOSURE

The invention relates to an antibody or antigen-binding fragment thereof which binds to the CXC chemokine receptor Bonzo (also referred to as STRL33, TYMSTR and HBMBU14) and blocks the binding of a ligand (e.g., SExCkine (also referred to as chemokine alpha-5) to the receptor. The invention also relates to a method of identifying agents (molecules, compounds) which can bind to Bonzo and inhibit the binding of a ligand (e.g., SExCkine) and/or modulate a function of Bonzo. The invention relates to an antibody or antigen-binding fragment thereof which binds to the CXC chemokine SExCkine (also referred to as chemokine alpha-5) and inhibit binding of SExCkine to receptor (e.g., Bonzo). The invention also relates to targeting molecules which contain a first binding moiety which binds to mammalian Bonzo and a second binding moiety which binds to a molecule expressed on the surface of a target cell. The invention also relates to a method of promoting and/or effectuating the interaction of a Bonzo<sup>+</sup> cell and a target cell. The invention further relates to a method of modulating a function of Bonzo, and to the use of the antibodies, antigen-binding fragments, targeting molecules and agents identified by the method of the invention in research, therapeutic, prophylactic and diagnostic methods.